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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,020	07/31/2001	James T. LaGrotta	12-21	3693

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EXAMINER

LE, KAREN L

ART UNIT PAPER NUMBER

2642

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/919,020

Applicant(s)

LAGROTTA ET AL.

Examiner

Karen L. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 May 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7, 10-13, 16-19, 22-25 and 28-30 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-7, 10-13, 16-19, 22-25 and 28-30 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

1. Applicant's amendment filed on May 20, 2005 has been entered. Claims 1-3, and 19-22 have been amended. Claims 8-9, 14-15, 20-21, and 26-27 have been cancelled. No claims have been added. Claims 1-7, 10-13, 16-19, 22-25 and 28-30 are still pending in this application, with claims 1, 10, 17, 24 and 29 being independent.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7, 10-13, 16-19, 22-25 and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art (Fig. 1) in view of Willebrand (US 2002/0149811).

Regarding claims 1, 10, 17, 24, and 29 admitted prior art teaches an RF base station apparatus (Fig. 1, item 105) comprising first RF communication equipment (Fig. 1, item 110), a processing and control section (fig. 1, item 120), processing and control section being at a significant distance from the RF antenna (Fig. 1, item 130). Fig. 1 of

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application's specification (prior art) does not teach first wireless optical communication equipment coupled to an RF communication equipment, second wireless optical communication equipment coupled to the processing and control section and the wireless optical communication equipment being adapted to communicate signals between RF communication equipment and processing and control equipment.

However Willebrand teaches routing network data traffic through an alternate communication path, re- evaluating the alternate communication path selection, and rerouting the network data traffic over the one or more free-space optical links in the free-space optical network (Para. 0010, Para. 0031 and Fig. 3, item 216 and 214).

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Willebrand's free-space optical communication system to the RF and the processing and control section of admitted prior art (Fig. 1, item 130 or 140) to replace the cable connection between to two sections of RF base station. It is always desirable to use wireless instead of cable in expensive land area to reduce cost without reducing the signal of the system.

Claims 2-4, 11-13, 18-19, 22, 25 and 30, are rejected for the same reason as claim 1.

Regarding claims 5-6, and 28, admitted prior art teaches the first wireless RF communication equipment comprises an RF antenna (Fig. 1, item 110), and RF module (Fig. 1, item 320).

Regarding claims 7, 16, and 23, prior art does not teach the wireless optical communication comprise a telescope. However, Willebrand teaches the wireless

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optical communication comprise a telescope (Fig. 3, item 206 or 216).

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-7, 10-13, 16-19, 22-25 and 28-30 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen L. Le whose telephone number is 571-272-7487. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad F. Matar can be reached on 571-272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Karen Le  
KLL

August 8, 2005



**BING Q. BUI**  
**PRIMARY EXAMINER**